

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A microelectromechanical system based fluid ejector, comprising:

an ejector nozzle;

a chamber that communicates with the ejector nozzle; and

a plurality of movable ejection structures associated with the ejector nozzle

and arranged to individually move in the chamber such that a variable volume of fluid is ejected from the associated ejector nozzle.

2. (Original) The ejector of claim 1, further comprising a medical fluid within the chamber.

3. (Original) The ejector of claim 2, wherein the medical fluid is a drug.

4. (Original) The ejector of claim 2, wherein the medical fluid is a biological material.

5. (Original) The ejector of claim 1, further comprising a controller that actuates each of the plurality of movable ejection structures independently.

6. (Original) The ejector of claim 1, wherein each of the plurality of movable ejection structures comprises a piston.

7. (Original) The ejector of claim 1, wherein each of the plurality of movable ejection structures comprises a flexible diaphragm.

8. (Original) The ejector of claim 1, further comprising a plurality of actuators, each of the actuators being associated with one of the ejection structures.

9. (Original) The ejector of claim 8, wherein each of the plurality of actuators comprises an electrostatic actuator.

10. (Original) The ejector of claim 8, wherein each of the plurality of actuators comprises a magnetic actuator.

11. (Original) The ejector of claim 8, wherein each of the plurality of actuators comprises a thermal actuator.

12. (Currently Amended) A method for ejecting a fluid using a microelectromechanical system based fluid ejector having a chamber, an ejector nozzle and a plurality of movable ejection structures disposed in the chamber and associated with the ejector nozzle, the method comprising:

moving a first movable ejection structure within the chamber;

moving a second movable ejection structure within the chamber; and

individually controlling the moving of the first and second movable ejection structures such that a variable volume of fluid is ejected from the associated ejector nozzle.

13. (Original) The method of claim 12, wherein controlling the moving of the first and second movable ejection structures is such that a continuous flow of fluid is ejected from the associated ejector nozzle.

14. (Original) The method of claim 13, wherein a flow rate of the continuous flow of fluid is constant.

15. (Original) The method of claim 12, wherein controlling the moving of the first and second movable ejection structures such that a variable volume of fluid is ejected from the associated ejector nozzle comprises ejecting a medical fluid.

16. (Original) The method of claim 15, wherein ejecting the medical fluid comprises ejecting at least one of a drug and a biological material.

17. (Original) The method of claim 12, wherein controlling the moving of the first and second movable ejection structures comprises controlling a plurality of actuators, each of the actuators being associated with one of the ejection structures.

18. (Currently Amended) The method of claim 12, wherein controlling the moving of the first and second movable ejection structures comprises electrostatically controlling the moving of the first and second movable ejection structures.

19. (Currently Amended) The method of claim 12, wherein controlling the moving of the first and second movable ejection structures comprises magnetically controlling the moving of the first and second movable ejection structures.

20. (Currently Amended) The method of claim 12, wherein controlling the moving of the first and second movable ejection structures comprises thermally controlling the moving of the first and second movable ejection structures.

21. (New) The method of claim 12, further comprising actuating each of the plurality of movable ejection structures independently.